

Amend the paragraph beginning at page 27, line 9 and ending at page 28, line 20 as follows:

Point mutations were introduced into PAP II by site-directed mutagenesis using a Quick-Change™ Mutagenesis Kit (Stratagene) following the manufacturer's instructions. In each mutagenesis experiment, two complementary primers containing a desired point mutation were designed. The PCR mixture contained 125 ng of each primer, 100 ng plasmid DNA template containing PAP II cDNA(NT264), 0.5 mM dNTP and 3 units of Pfu DNA polymerase. PCR was run for 16 cycles (95°C for 30 sec, 55°C for 1 min and 68°C for 12 min; for two nucleotide mutations, time was extended to 18 min). At the end of PCR, 1 unit of *DpnI* restriction enzyme was added to the PCR products for digestion of the parental methylated plasmid DNA at 37°C for 1 hr. Five microliters of the *DpnI* digested PCR products were used for transformation of Epicurian Coli XL1-Blue Super-Competent cells (Stratagene) and plated on Amp+ LB. Mutagenized plasmids were isolated and the presence of the mutated nucleotide was confirmed by sequencing both strands of PAPII using the Sequenase 2.0 DNA Sequencing Kit (United States Biochemical). The primers for mutagenesis were as follows (wherein the numbering of amino acid as designed according to the mature sequence of PAP II):

NT288 (G72D)

G72DF: TTTGGAGGACTATTCTGAC (SEQ. ID NO:6)

G72DR: GTCAGAATAG TCCTCCAAA (SEQ. ID NO:7)

NT268 (E172V):

E173F: CCGTTCAAATGGTTACTGTGGCATCAAGGTTT (SEQ. ID NO:8)

E173R: GAACCTTGATGCCACAGTAACCATTTGAACGG (SEQ. ID NO:9)

NT266(W238stop):

W238F: AAACCTTAGACTACGGCCAC (SEQ. ID NO:10)

W238R: GTGGCCGTAGTCTAAGGTTT (SEQ. ID NO:11)

NT288(W238R)

W238RF: AAACCTAGGACTACGGCCAC (SEQ. ID NO:12)

W238RR: GTGGCCGTAG TCCTAGGTTT (SEQ. ID NO:13)

NT309(L253A)

L253AF: CGACATTATGGCAGCCCTAACCCACGTTAC (SEQ. ID NO:14)

L253AR: GTAACGTGGG TTAGGGCTGC CATAATGTCTG (SEQ. ID NO:15)

NT280 (L254R)

L254RF: CGACATTATGGCACTCCGAACCCACGTTACTTGC (SEQ. ID NO:16)

L254RR: GCAAGTAACGTGGGTTCGGAGTGCCATAATGTCTG (SEQ. ID NO:17)

NT271(K260stop):

K260F: CACGTTACTTGCTAGGTTAAAAGTTC'CATGTTCC (SEQ. ID NO:18)

K260R: GGAACATGGAAC'TTTTAACCTAGCAAGTAACGTG (SEQ. ID NO:19)

MARKED-UP COPY OF AMENDED SPECIFICATION PARAGRAPHS:

Amend the paragraph beginning at page 16, line 19 as follows:

Total RNA was isolated from 1 gram of pokeweed leaves using Tri-Reagent (Molecular Research Center, Cincinnati, OH). Poly A+ RNA was isolated using an oligo-dT affinity resin (Stratagene, LaJolla, CA). The cDNA library was constructed from 5 µg total mRNA with a lambda ZAP-cDNA synthesis kit according to the manufacturer's instructions (Stratagene, LaJolla, CA). The cDNA library, the titer of which was 6.25×10^8 pfu/µg, was transferred to nitrocellulose and probed with 8×10^6 cpm of ^{32}P -labeled oligonucleotide 5'GGGTTGTTTCAGTGAGGGTTGTGGCC3' (SEQ. ID NO:5) corresponding to the N-terminal region of PAPII cDNA (Poyet, *et al.*, FEBS Lett 347:268-272 (1994)). Four clones with approximately 1 kb inserts were sequenced using the dideoxy chain termination method.

Amend the paragraph beginning at page 27, line 9 and ending at page 28, line 20 as follows:

Point mutations were introduced into PAP II by site-directed mutagenesis using a Quick-Change™ Mutagenesis Kit (Stratagene) following the manufacturer's instructions. In each mutagenesis experiment, two complementary primers containing a desired point mutation were designed. The PCR mixture contained 125 ng of each primer, 100 ng plasmid DNA template containing PAP II cDNA(NT264), 0.5 mM dNTP and 3 units of Pfu DNA polymerase. PCR was run for 16 cycles (95°C for 30 sec, 55°C for 1 min and 68°C for 12 min; for two nucleotide mutations, time was extended to 18 min). At the end of PCR, 1 unit of *DpnI* restriction enzyme was added to the PCR products for digestion of the parental methylated plasmid DNA at 37°C for 1 hr. Five microliters of the *DpnI* digested PCR products were used for transformation of Epicurian Coli XL1-Blue Super-Competent cells (Stratagene) and plated on Amp+ LB. Mutagenized plasmids were isolated and the presence of the mutated nucleotide was confirmed by sequencing both strands of PAPII using the Sequenase 2.0 DNA Sequencing Kit (United States Biochemical). The primers for mutagenesis were as follows (wherein the numbering of amino acid as designed according to the mature sequence of PAP II):

NT288 (G72D)

G72DF: TTTGGAGGACTATTCTGAC (SEQ. ID NO:6)

G72DR: GTCAGAATAG TCCTCCAAA (SEQ. ID NO:7)

NT268 (E172V):

E173F: CCGTTCAAATGGTTACTGTGGCATCAAGGTTC (SEQ. ID NO:8)

E173R: GAACCTTGATGCCACAGTAACCATTTGAACGG (SEQ. ID NO:9)